in the operations specifications, no person may release for flight or takeoff a turbine-engine powered airplane (other than a turbo-propeller powered airplane) unless, considering wind and other weather conditions expected, it has enough fuel—

- (1) To fly to and land at the airport to which it is released;
- (2) After that, to fly for a period of 10 percent of the total time required to fly from the airport of departure to, and land at, the airport to which it was released;
- (3) After that, to fly to and land at the most distant alternate airport specified in the flight release, if an alternate is required; and
- (4) After that, to fly for 30 minutes at holding speed at 1,500 feet above the alternate airport (or the destination airport if no alternate is required) under standard temperature conditions.
- (c) No person may release a turbineengine powered airplane (other than a turbo-propeller airplane) to an airport for which an alternate is not specified under §121.621(a)(2) or §121.623(b) unless it has enough fuel, considering wind and other weather conditions expected, to fly to that airport and thereafter to fly for at least two hours at normal cruising fuel consumption.
- (d) The Administrator may amend the operations specifications of a certificate holder conducting flag or supplemental operations to require more fuel than any of the minimums stated in paragraph (a) or (b) of this section if he finds that additional fuel is necessary on a particular route in the interest of safety.
- (e) For a supplemental operation within the 48 contiguous States and the District of Columbia with a turbine engine powered airplane the fuel requirements of §121.643 apply.

[Doc. No. 6258, 29 FR 19222, Dec. 31, 1964, as amended by Amdt. 121-10, 30 FR 10025, Aug. 12, 1965; Amdt. 121-144, 43 FR 22649, May 25, 1978; Amdt. 121-253, 61 FR 2615, Jan. 26, 1996]

## $\S 121.647$ Factors for computing fuel required.

Each person computing fuel required for the purposes of this subpart shall consider the following:

(a) Wind and other weather conditions forecast.

- (b) Anticipated traffic delays.
- (c) One instrument approach and possible missed approach at destination.
- (d) Any other conditions that may delay landing of the aircraft.

For the purposes of this section, required fuel is in addition to unusable fuel.

## §121.649 Takeoff and landing weather minimums: VFR: Domestic operations.

- (a) Except as provided in paragraph (b) of this section, regardless of any clearance from ATC, no pilot may takeoff or land an airplane under VFR when the reported ceiling or visibility is less than the following:
- (1) For day operations—1,000-foot ceiling and one-mile visibility.
- (2) For night operations—1,000-foot ceiling and two-mile visibility.
- (b) Where a local surface restriction to visibility exists (e.g., smoke, dust, blowing snow or sand) the visibility for day and night operations may be reduced to ½ mile, if all turns after takeoff and prior to landing, and all flight beyond one mile from the airport boundary can be accomplished above or outside the area of local surface visibility restriction.
- (c) The weather minimums in this section do not apply to the VFR operation of fixed-wing aircraft at any of the locations where the special weather minimums of §91.157 of this chapter are not applicable (See part 91, appendix D, section 3 of this chapter). The basic VFR weather minimums of §91.155 of this chapter apply at those locations.

[Doc. No. 6258, 29 FR 19222, Dec. 31, 1964 as amended by Amdt. 121-39, 33 FR 4097, Mar. 2, 1968; Amdt. 121-206, 54 FR 34331, Aug. 18, 1989; Amdt. 121-226, 56 FR 65663, Dec. 17, 1991]

## §121.651 Takeoff and landing weather minimums: IFR: All certificate hold-

- (a) Notwithstanding any clearance from ATC, no pilot may begin a takeoff in an airplane under IFR when the weather conditions reported by the U.S. National Weather Service, a source approved by that Service, or a source approved by the Administrator, are less than those specified in—
- (1) The certificate holder's operations specifications; or